

Title (en)
HIGH PERFORMANCE TIGHTENER

Title (de)
LEISTUNGSSTRAFFER

Title (fr)
PRE-TENTIONNEUR PERFORMANT

Publication
EP 1487679 B1 20060830 (DE)

Application
EP 03745286 A 20030328

Priority
• DE 10213906 A 20020328
• EP 0303271 W 20030328

Abstract (en)
[origin: WO03082640A1] A self-blocking seat-belt retractor comprising a housing (10), at least one locking device (23) for the seat-belt shaft (12), consisting of a locking means (25) which can be controlled in a vehicle-sensitive and/or seat-belt-sensitive manner and which engages in a locking toothed gearing system on the side of the housing, also comprising a tightening device which acts upon the belt shaft (12) and consists of a drive wheel (13) which is placed in a rotating position by a drive device (51), said drive wheel being able to be coupled to the belt shaft (12) when the tightening device is released. The invention is characterised in that the drive wheel (13) of the tightening device can be connected to the belt shaft (12) in a force-transmitting manner by the locking device (23) for the belt shaft (12).

IPC 8 full level
B60R 22/405 (2006.01); **B60R 22/46** (2006.01); **B60R 22/28** (2006.01); **B60R 22/343** (2006.01)

CPC (source: EP KR US)
B60R 22/405 (2013.01 - EP US); **B60R 22/46** (2013.01 - EP KR US); **B60R 22/4628** (2013.01 - EP US); **B60R 22/343** (2013.01 - EP US); **B60R 22/36** (2013.01 - EP US); **B60R 22/4676** (2013.01 - EP US); **B60R 2022/287** (2013.01 - EP US); **B60R 2022/4642** (2013.01 - EP US); **B60R 2022/468** (2013.01 - EP US)

Cited by
CN103847686A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 03082640 A1 20031009; AT E337952 T1 20060915; AT E400479 T1 20080715; AU 2003226744 A1 20031013; BR 0308922 A 20050104; BR 0308922 B1 20130305; CN 100335318 C 20070905; CN 1655973 A 20050817; DE 10213906 A1 20031023; DE 10213906 B4 20061123; DE 50304857 D1 20061012; DE 50310135 D1 20080821; EP 1487679 A1 20041222; EP 1487679 B1 20060830; EP 1632409 A1 20060308; EP 1637414 A1 20060322; EP 1637414 B1 20080709; ES 2273022 T3 20070501; ES 2309640 T3 20081216; JP 2005529779 A 20051006; JP 2006188233 A 20060720; JP 4341018 B2 20091007; KR 100912750 B1 20090818; KR 20050005430 A 20050113; US 2005178870 A1 20050818; US 7429012 B2 20080930

DOCDB simple family (application)
EP 0303271 W 20030328; AT 03745286 T 20030328; AT 05025124 T 20030328; AU 2003226744 A 20030328; BR 0308922 A 20030328; CN 03812165 A 20030328; DE 10213906 A 20020328; DE 50304857 T 20030328; DE 50310135 T 20030328; EP 03745286 A 20030328; EP 05025123 A 20030328; EP 05025124 A 20030328; ES 03745286 T 20030328; ES 05025124 T 20030328; JP 2003580130 A 20030328; JP 2006104632 A 20060309; KR 20047015193 A 20030328; US 51603305 A 20050110